

REMARKS

Claims 1-14 are pending in the application. It is gratefully acknowledged that Claims 4 and 12 have been objected to as being dependent upon rejected base claims, but would be allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims. The Examiner has rejected Claims 1-3, 5, 6, 8 and 9 under 35 U.S.C. §102(b) as being anticipated by Applicant's Admitted Prior Art. The Examiner has rejected Claims 7, 10, 13 and 14 under 35 U.S.C. §103(a) as being unpatentable over Applicant's Admitted Prior Art in view of van Driest (U.S. Patent 6,314,145).

On January 26, 2005 Applicants' representative, Michael J. Musella, esq., conducted a telephone interview with the Examiner. No agreement was reached, but withdrawal of the finality of the previous Office Action was in issue.

First, it is respectfully submitted that Claim 11 is being mischaracterized as being prior art. In the previous Response it was explained that as disclosed in the prior art it is possible to calculate a timing error by calculating a slope for the index of the phase difference and then dividing the calculated slope by $2\pi/N$. Claim 11 recites "compensating...the timing error by converting the count value to a phase difference line and estimating a slope of the phase difference line." The Examiner requests an explanation into how the count value is converted to compensate the timing error. This procedure recited in Claim 11 is defined on page 17 of the specification, and also defined in Fig. 8.

Regarding the rejection of independent Claims 1, 2, 5 and 8 under §102(b), the Examiner maintains that the Admitted Prior Art discloses all of the elements of the claims. In the Response to Arguments section on pages 11-13 the Examiner responds to the arguments presented in the previous Response. Regarding Claim 1, the Examiner states that each pilot symbol of the prior art "inherently" has the same phase since the pilot symbols are inserted at regular intervals. This is an incorrect assumption. Claim 1 recites "inserting N pilot symbols each having a same phase using a specific period in a symbol unit to compensate a timing error of a receiver." It is

respectfully submitted that the “phase” recited in Claim 1 is not the same as a frequency or a regular interval recited in the prior art section. Examiner is directed to page 14, lines 10-15 for one example of the difference between the phase and frequency in the present application. The present invention can, among other things, compensate for frequency errors based on the phase of the pilot symbols. Frequency and phase are different elements in the present application, and the use of the phase differences to compensate for timing errors is not disclosed in the prior art. Withdrawal of the rejection of Claim 1 is respectfully requested.


In each of independent Claims 2, 5, 8 and 10, a similar method or apparatus is described that, similar to Claim 1, uses the phase difference to compensate for timing errors. Based on at least the foregoing, withdrawal of the rejections of Claims 2, 5, 8 and 10 is respectfully requested.

It is also respectfully submitted that the claims of the present application inserts pilot signals in a unit of symbol data rather than in the unit of sample data as disclosed in the Admitted Prior Art. The claims of the present application insert pilot signals into a set of consecutive sample data, whereas the Prior Art inserts a pilot sample at regular intervals, not pilot symbol. Based on at least the foregoing, withdrawal of the rejections of Claims 1, 2, 5, 8 and 10 is respectfully requested.

Independent Claims 1, 2, 5, 8 and 10 are believed to be in condition for allowance. Without conceding the patentability per se of dependent Claims 3, 4, 6, 7, 9 and 11-14, these are likewise believed to be allowable by virtue of their dependence on their respective amended independent claims. Accordingly, reconsideration and withdrawal of the rejections of dependent Claims 3, 4, 6, 7, 9 and 11-14 is respectfully requested.

Accordingly, all of the claims pending in the Application, namely, Claims 1-14, are believed to be in condition for allowance. Should the Examiner believe that a telephone conference or personal interview would facilitate resolution of any remaining matters, the Examiner may contact Applicants' attorney at the number given below.

Respectfully submitted,

A handwritten signature in black ink, reading "Peter G. Dilworth". The signature is fluid and cursive, with the first name "Peter" and last name "Dilworth" clearly legible.

Peter G. Dilworth

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